

ABSTRACT

In wavelet transform encoding, high-quality encoding is to be realized by enabling picture quality control from one fractional area to another. An input picture 100 is read out in an amount corresponding to a number of lines required for wavelet transform and buffered in a memory unit 6. The input picture then is wavelet transformed in a wavelet transform unit 2 and quantized in a coefficient quantizing unit 3. In quantizing wavelet transform coefficients, the wavelet transform coefficients are multiplied by weighting coefficients from one sub-band to another. The weighting coefficients are determined using the analysis information of a specified block area in a picture, such as motion information and texture fineness information. This enables fine quantization control in terms of a picture block as a unit.